

Table 4.6 Treatment Facility Design Specifications

	Long Beach	Los Angeles	Humboldt	Oakland	San Francisco	Sacramento	San Diego	Stockton	Redwood City	Richmond	Hueneme
Loading											
Flow (mgd)	1.0	1.0	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.001
Flow 8-Hour Operating Cycle (mgd)	--	--	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.3	--
Suspended Solids (mg/l)	25	25	25	25	25	25	25	25	25	25	25
Suspended Solids (lbs/Day)	208	208	42	42	42	21	21	21	21	21	0.2
Filters - Continuous Backwash											
# Operating Filters	3	3	2	2	2	1	1	1	1	1	See note 1
# Standby Filters	1	1	1	1	1	1	1	1	1	1	1
Filter Diameter (ft)	8	8	8	8	8	8	8	8	8	8	8
Filter Area (ft ²)	50	50	50	50	50	50	50	50	50	50	50
Filtration Rate (gpm/ft ²)	5	5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Reject (backwash) flow (gpm)	45	45	30	30	30	15	15	15	15	15	15
Reject Volume (gpd)	64,800	64,800	14,400	14,400	14,400	7,200	7,200	7,200	7,200	7,200	7,200
UV Disinfection Channel											
Dosage (uWs/cm ²)	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	
Channel Length (in)	115	115	115	115	115	96	96	96	96	96	
Channel Width (in)	37	37	20	20	20	22	22	22	22	22	
Channel Depth Wetted (in)	20	20	24	24	24	18	18	18	18	18	
Residual Thickening											
<i>Dissolved Air Flotation</i>											
Number	1	1	--	--	--	--	--	--	--	--	--
Length (ft)	12	12	--	--	--	--	--	--	--	--	--
Width (ft)	8	8	--	--	--	--	--	--	--	--	--
<i>Inclined Plate</i>											
Number	--	--	1	1	1	1	1	1	1	1	1
Area (ft ²)	--	--	125	125	125	125	125	125	125	125	125
<i>Applied Load</i>											
Flow (gpm)	45	45	30	30	30	15	15	15	15	15	
Solids (lbs/Day)	208	208	42	42	42	21	21	21	21	21	
Solids 8-hr Cycle (lbs/Day)	--	--	126	126	126	63	63	63	63	63	
Concentration (mg/l)	390	390	350	350	350	350	350	350	350	350	
Loading Rate (lb/ft ² /Day)	2.2	2.2	--	--	--	--	--	--	--	--	--
<i>Float/Thickened Sludge</i>											
Flow (gal/day)	840	840	500	500	500	250	250	250	250	250	
Assumed Concentration (%)	3	3	1	1	1	1	1	1	1	1	
Residual Dewatering											
<i>Plate and Frame Press</i>											
Number	1	1	1	1	1	1	1	1	1	1	1
Press Volume (ft ³)	5	5	2	2	2	2	2	2	2	2	2
Cycles/Day	4	4	2	2	2	1	1	1	1	1	1
Assumed Dewatered Solids Conc (%)	20	20	20	20	20	20	20	20	20	20	
Wet Cake Weight (lb/Day)	1,040	1,040	210	210	210	105	105	105	105	105	
Wet Cake Volume (ft ³ /Day)	17	17	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	

Notes:

1) Treatment for the Port of Hueneme is likely not feasible. See Section 4.4.1 for discussion.